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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,598	08/09/2001	Thomas D. Miller	020554-001010US	8191
31894	7590	04/29/2005	EXAMINER	
OKAMOTO & BENEDICTO, LLP P.O. BOX 641330 SAN JOSE, CA 95164			NANO, SARGON N	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,598

Applicant(s)

MILLER ET AL.

Examiner

Sargon N. Nano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This action is responsive to amendment filed on Jan. 21, 2005. Claims 1 – 24 are pending examination. Claims 1, 2, 4, 5 - 14, 16 – 24 are amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Bommaiah et al U.S. Patent No 6,708,213 in view of Chiu et al. U.S. Patent No 6,526,022 (referred to hereafter as Chiu).

As to claim 1 and 12 Bommaiah teaches a communications system and a method for transporting multiple individual video streams from a centralized location to multiple end user devices the system comprising:

a network that transmits the multiple individual video streams from a centralized location to a local center located nearer than the centralized location to the multiple end user devices (see col. 4 lines 31- 39 , and fig. 2. Bommaiah discloses multiple video streams delivered to helpers and in turn streams of data are delivered to multiple clients) ;

a video cache at the local center capable of receiving the multiple individual video streams from the centralized location (see col.5 lines 16 – 29 Bommaiah discloses the storing of the streaming media in a local cache) ;

multiple customer premises devices capable of receiving the multiple individual video streams from the video cache (see col. 4 lines 31- 39 , and fig. 2. Bommaiah discloses multiple video streams delivered to helpers and in turn streams of data are delivered to multiple clients); and

a stream manager that controls the multiple individual video streams from the centralized location to the local center (see col.10 line 23 - 55, Bommaiah discloses the managing of disks space allocated for caching),

wherein the stream manager is configured to control bandwidth prioritization between the centralized location and the local center (see col.10 lines 23 - 67, Bommaiah discloses the managing network bandwidth according to priority).

Bommaiah does not explicitly teach the limitation “ the bandwidth prioritization is controlled by the stream manager such that as an individual video stream reaches a low fill level in the video cache at the local center, that as an individual video stream is

assigned a higher bandwidth priority when compared to other individual video streams that have fuller fill levels” However Chiu teaches adjusting the transmission bandwidth according to the cache fill level to avoid congestion (see Chiu col.11 line 19 – 36, Chiu discloses dynamically adjusting transmission rate packets in a system when congestion is detected). It would have been obvious to one of the ordinary skill in the art to include bandwidth prioritization in Boumaiah's invention as taught by Chiu because doing so would allow the system to adjust transmission rate before a congestion grows to higher level of packet lost rate.

As to claim 2 and 14 Bommaiah teaches the system and a method wherein the network comprises any one or a combination of multiple packet based networks, wherein the network carries video data and control communications between the stream manager and the video cache (see col. 4 lines 31- 39 , and fig. 2) .

As to claim 3 and 15 Bommaiah teaches the system and method wherein the network comprises any packet based network, wherein the network carries video data, the system further comprising communication links, wherein the communication links carry control communications between the stream manager and the video cache (see col. 4 lines 31- 39 , and fig. 2).

As to claim 4 and 16 Bommaiah teaches the system and method wherein the video cache at the local center is capable of receiving video data from the centralized location at a transmission speed somewhat faster than the speed at which the end user is capable of viewing the material (see col.8 line 57 – col.9 line 24).

As to claim 5 and 17, Chiu teaches the system and method wherein the video cache at the local center is further capable of determining when a data packet has been corrupted or lost during the transmission and signaling the centralized location to retransmit the necessary packet (see col.8 lines 5 – 15).

As to claim 6 and 18 Bommaiah teaches the system and method wherein the video cache based at the customer premises is capable both of receiving video data from the video cache at the local center at a speed somewhat faster than the end user is capable of viewing the material and is capable of delaying the viewing of the video content for 3-30 seconds to allow for a buffer to be created (see col.8 line 57 – col.9 line 24).

As to claim 7 and 19 Chiu teaches the system and method wherein the video cache based at the customer premises is further capable of determining when a data packet has been corrupted or lost during transmission and signaling to the video cache at the local center to retransmit the necessary data packet (see col.8 lines 5 – 15).

As to claim 8 and 20 Bommaiah teaches the system and method wherein the video data may be previously stored , live or a combination of previously stored and live (see col. 2 line 57 – col. 3 line 10).

As to claim 9 and 21 Bommaiah teaches the system and method wherein the stream manager is further configured to determine whether video content stored at the central location is candidate for archiving at the local center based upon:

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available storage space in video storage at the local center(see col.4 lines 16 – 30).

history of the content being previously accessed by the end user devices served by that local center(see col. 10 line17 – 66).

As to claim 10 and 22 Chiu teaches the system and method wherein the stream manager is further capable of prioritizing the transmission of the various streams based on a combination of the following:

the type of video data ;

the amount of video data remaining in the caches which require refreshing(see col.8 lines 5 – 15);

the speed at which the end user is viewing the video (see col. 21 line 30 – 57);
and

the necessity to retransmit data due to corruption of video data and lost data packets (see col.8 lines 5 – 15).

As to claim 11 and 23 Bommaiah teaches the system and method wherein the stream manager is further capable of determining the volume of video data being transmitted over the network and distributing the total volume of video data over multiple networks, including transmission over the public Internet (see col. 6 lines 36 – 58).

As to claim 12 and 24 Chiu teaches the system and method wherein the stream manager is further capable determining the instantaneous amount of bandwidth required to transmit the video information to each end user and staggering the transmission of high bandwidth instants with lower bandwidth instants in other video data streams to produce a smoother, aggregated stream (see col.11 line 19 – 36).

Conclusion

Response to Arguments

3. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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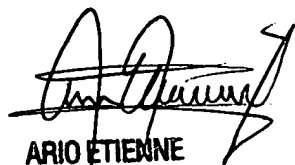
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon N. Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on Monday – Friday from 8:30 – 5:30

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sargon Nano

April 20, 2005


ARIO ETIENNE
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